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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,854

03/31/2005

Kojiro Tanaka

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04/29/2008

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EXAMINER

SHEN, BIN

ART UNIT

PAPER NUMBER

1657

MAIL DATE

DELIVERY MODE

04/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/529,854	TANAKA, KOJIRO	
	Examiner	Art Unit	
	BIN SHEN	1657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 5-8, 17 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9-16, 19-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Status of the Claims

Claims 1-20 have been presented for examination. Claims 5-8, 16-17 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was effectively made without traverse in the reply filed on 27 April, 2007. Claims 1-4, 9-16, 19-20 are considered on the merits.

In view of applicant's arguments and the rewritten claims, the rejections under 35 USC § 102(b) is hereby withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 9-16, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Tsai et al. in view of Tanaka et al. (Wat. Res. 1997;31(8):1913-1918).

Tsai et al. teach a measuring kit (abstract and page 75, Fig.1) of microorganisms in a liquid sample comprising a first syringe, a flocculant (phosphoric acid buffer agent, page 75, left column, line 1), a first filter case (page 75, right column, 1st full paragraph), a second filter case, (end of page 75 to beginning of page 76), a washing liquid (page 76, line 7); a bacteriolytic agent (page 75, left column, 2nd full paragraph), a measuring tube, a luminous reagent (page 76, 2nd full paragraph), a luminometer (page 76, right column, 1st full paragraph), wherein the filtering material of a pore diameter of about 1 μm to about 10 μm as the first filter (page 75, right column, 1st full paragraph, lines 18-19), wherein the second filter is a porous polymer membrane having pores of a pore diameter of about 0.1 μm to about 0.5 μm (page 76, left column, line 1), wherein a sterile distilled water is added to the sample (page 75, Fig. 1).

Tsai does not teach a second syringe, the particular washing liquid as claimed, using of sterile distilled water to make the solid sample into liquid sample.

Tanaka teaches a measuring kit of microorganisms that filter with a suction pump (page 1914, bottom of right column), and the ATP extractive reagent contains ethyl alcohol (page 1914, right column, line 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Tsai by using a second syringe, using ethanol as taught by Tanaka because the two kits are all used to measure microorganisms. One would have been motivated to make the modification because it will speedup the measurement, and would reasonably have expected success in view of both Tsai and Tanaka's teachings because Tsai teaches the use of one syringe for two filters connected in tandem (page 75, right column, 1st full paragraph), thus use of one syringe for each filter will speedup the improve the kits. A person of ordinary skill in the are, upon reading the reference, would also have recognized the desirability of improved the kits by optimizing the washing liquid, and using sterile distilled water to make the solid sample into liquid sample is obvious because contamination of microorganisms will be avoided in sterile water.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Applicant's arguments filed 1/22/2008 have been fully considered but they are not persuasive.

Applicant argues that Tsai fails to disclose or suggest at least "flocculant for flocculating protein", fails to disclose or suggest including a bacteriolytic agent added to the filter.

It is the examiner's position that Tsai teaches "phosphoric acid buffer agent" (page 75, left column, line 1, also as admitted by applicant's representative in the response file 1/22/2008, page 14, line 6) which is broadly interpreted a flocculant because "phosphoric acid flocculant" is

one of the flocculant described in the specification (see [0007] and [0010] etc.). Tsai teaches the use of a bacteriolytic agent "lysostaphin" (page 75, left column, 2nd full paragraph) on the filter.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

No claim is allowed.

Certain papers related to this application may be submitted to Art Unit 1657 by facsimile transmission. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 C.F.R. § 1.6(d)). The official fax telephone number for the Group is 571-273-8300. NOTE: If Applicant *does* submit a paper by fax, the original signed copy should be retained by applicant or applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED so as to avoid the processing of duplicate papers in the Office.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of

document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Any inquiry concerning rejections or objections in this communication or earlier communications from the examiner should be directed to Bin Shen, Ph.D., whose telephone number is (571) 272-9040. The examiner can normally be reached on Monday through Friday, from about 9:00 AM to about 5:30 PM. A phone message left at this number will be responded to as soon as possible (i.e., shortly after the examiner returns to her office).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Jon Weber can be reached at (571) 272-0925.

B Shen

Art Unit 1657

/Jon P Weber/

Supervisory Patent Examiner, Art Unit 1657